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ABSTRACT

Strategies to enhance the economic stability of community colleges through high technology approaches are discussed in this paper. First, general economic problems facing higher education are identified, and the ways in which they influence community colleges are described. Next, 10 strategies to aid in the economic recovery of community colleges are presented, based on a literature review identifying factors which promoted recovery in the Great Depression era and which have helped public and private institutions near closing since the 1960s. The strategies outlined are: (1) balancing the budget through research, resource analysis, and cost effectiveness; (2) conducting a prolonged institutional self-study; (3) determining the college's mission; (4) improving spirit and morale; (5) lowering personnel costs; (6) changing public attitudes toward the institution; (7) offering a quality curriculum; (8) collaborating with other colleges and with business, industries, and agencies; (9) developing strong leadership; and (10) determining the appropriate number of students. Finally, a case study of Johnson County Community College's high technology approach to enhancing economic stability is presented, emphasizing staff development; high technology curriculum offerings which utilize foundation, core, and periphery courses; and curriculum delivery based on increased cooperation with business, labor, and government. (HB)

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ENHANCING ECONOMIC STABILITY UTILIZING THE HIGH TECHNOLOGIES IN COMMUNITY COLLEGES: A CASE STUDY

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ENHANCING ECONOMIC STABILITY UTILIZING THE HIGH TECHNOLOGIES IN COMMUNITY COLLEGES: A CASE STUDY

by Barbara H. Mehnert and Allan W. Kurki

Do community colleges today need enhancement of their economies? Some community colleges appear to have had good economic stability, yet similar forces are impinging upon them that are affecting all of higher education. Though these forces are at work, community colleges nonetheless have particular strengths that can be utilized in this high technology era. Today we will describe the general economic problems in higher education, the way in which they impact the community colleges, and ten key recovery tactics for our high technology times that can be incorporated. A case study of a college which is utilizing the high technologies to enhance stability will be presented.

Since the latter half of the 1960s a major income-expenditure problem has existed generally on the educational scene. With inflation, increased salary costs, the tightening of available monies, enrollment problems, increased demands for broader access, and rising overhead due to accountability problems, the tentacles of economic adversity have touched increasing numbers of both private and public institutions during the decade of the 1970s and early 1980s. Recently business has been contracting; interest rates have generally remained high; and energy

costs have escalated in many areas, including electricity, fuel, and gasoline.

In addition, taxes of all kinds -- federal, state, city, sales, and social security -- have become higher for all income groups. With the wage price spiral and increased governmental costs at all levels, Americans have had to allocate increasing amounts of their dollars to taxes. With this tax situation, resident taxpayers have infrequently voted themselves hefty tax increases or supported bond issues to augment their educational systems.

There are even further problems. Extra income obtained over the last several years has been earmarked primarily for salary increases. Salary expenses, due to tenure systems, are fixed long-term commitments. Faculty groups have generally become entrenched, and in many locales unionization has occurred.

There has been more recourse through the courts by faculty and students, thus adding to the institutions' cost burdens. Public interest law firms have brought suit in order to force compliance with regulations. Various discrimination suits have been a reality. All of these concerns have been a financial burden necessitating expensive legal protection as well as costly procedures to meet regulations. Thus, due to both internal and external expenses, the battle for stability has begun.

The community college has appeared until recent years to remain relatively unaffected by these factors. The last 20 years have been a period of unprecendented growth in income, programming, and enrollment. They have been the fastest-growing segment of American post-secondary education and have had, according to Riesman (1980), the strongest power of survival and growth.

But community colleges have reached the height of their power, and potent forces are at work to produce changes. It can well be debated that in spite of their apparent vitality, the community colleges have begun to follow the same path as other institutions of higher education.

Already the community colleges have begun to feel the income-expenditure squeeze, as other private and public institutions of higher education have. In recent years the rosy, affluent picture has changed for many community colleges. Income has slowed its rate of increase or has even begun a decline. Costs, on the other hand, have kept on rising. Public community colleges have had to cope, according to Minter and Bowen (1980), with a 17% consumer price index rise during recent years, yet revenues have risen only 9%. Local, state, and federal monies have not kept pace with rising costs, and in many instances have been cut, as government itself has been faced with limited resources and high inflation.

Community colleges also have had to assume new responsibilities. They have had to deal with socially mandated programs, provisions for the handicapped, and multiple accountability. They have had a heavy burden of compliance with regulations and reporting. Thus, effective management has ramifications for a good proportion of the students in community colleges as well. After a prolonged period of building, expanding, and undertaking new responsibilities, the trend in the community college today is generally in the other direction. Recovery strategies are now needed.

Especially hard hit are the community colleges in urban, economically depressed areas, and particularly those in the northern and eastern sections of the United States.

Therefore, a literature study for the Association for the Study of Higher Education and ERIC Clearinghouse on Higher Education called Effective Strategies for the Recovery of Higher Education, Higher Education Research Report No. 6 (Mehnert, 1983), was undertaken. This research was on factors which helped the following to recover: Great Depression era, private institutions since the 1960s and current public institutions which have been close to closing. Ten key strategies for recovery were identified.

All colleges immediately react to economic problems in a similar manner. According to Cheit (1971; 1973), certain cutbacks have been used by all colleges and universities, public or private, modern or Depression-era. These are the so-called "painless ones." Cuts in expenditures are made, but often they are not sufficiently deep to change the basic structure of the academic community. Institutions become wary of undertaking new obligations. Many institutions immediately cut capital outlay for new programs and buildings. Preventive maintenance is curtailed, supply budgets are closely scrutinized, and expenditures for travel are reduced. During the era of the Great Depression, higher education experienced an overall salary reduction averaging 15%. Public institutions had a severe, sudden drop of 40% of income within two years, 1929 to 1931 (AAUP, 1937).

But, innovation is needed when an institution can least afford it. The immediate temptation, again, is to slice programs and people. Yet the private institutions, having endured the cost-income squeeze since the late 1960s, have nonetheless initiated positive solid recovery strategies that "turned the tide." And these can be used with the community colleges in this new high technology era.

TEN RECOVERY STRATEGIES

So let us turn now to the ten key recovery strategies. These

are presented in the ranked, descendant order, as they appeared in the literature.

The most effective strategy for enhancing economic stability has been balancing the budget by research, resource analysis, and cost effectiveness. There has been an imperative need for an institution to know where it is. Educators have traditionally had a certain abhorrance for planning. Yet careful financial analysis and management is the most key operant factor in higher education today. The emphasis is on reliable unit cost analysis. This need has been echoed in nearly every contemporary document encountered. Colleges are accountable for every dollar spent. Concommitant with the need for accurate financial data is the necessity to establish a strong institutional research office to know their exact circumstances and the appropriate places to focus their energies.

From this evolves effective recovery strategies No. 2 and 3: A prolonged self-study, incorporating all elements in the community college and determining that college's unique mission. What does the community college do best, and what can it hope to do best? Where are its unique talents and abilities? Whom does it serve, and in which capacities does it serve best? The community college can no longer be all things to all people. Concomitant with this process of a prolonged, careful self-study,

incorporating all elements of the campus, hopefully, is an improvement in spirit and morale that can infuse the entire college, the effective strategy No. 4.

The fifth strategy for enhancing stability is lowering personnel costs. Often personnel programs of early retirement, the granting of leaves for those individuals who wish to explore other options, and even the termination of the least productive or least versatile of the staff, can enable cost savings. But basically lowering personnel costs can come down to utilizing everyone more effectively through staff development activities which the case study of Johnson County Community College demonstrates. People can learn new skills for this high technology era.

Faculty members will have to take responsibility for their own actions and their own productivity. As Gail Thain Parker said in her book The Writing on the Wall (1979), faculty members will need to prove that well-educated people are resourceful and resilient. They will need to take on added responsibilities, such as a willingness to go to off-campus sites at odd hours. Faculty members will need to be profiled and thoroughly evaluated for their strengths and areas of potential growth and renewal in this new highly technological area. This may take many forms:

1. Faculty may be retrained in new technologies of teaching

and learning incorporating modern technology, to help improve their program areas. This could include use of microcomputers, and computer literacy training.

2. High cost faculty could be reallocated to other more productive institutional functions.

3. Faculty may be retrained into related disciplines and subdisciplines. For example, there are high technology "spin offs" from the math and science disciplines.

Sabbatical leaves, training grants, and funds similar to the ones dispensed by the California Center for Professional Development may be used to retrain staff.

The sixth effective recovery strategy involves a change in public attitudes toward the institution. Ultimately continuous support of the community college rests both upon an understanding and acceptance of its educational objectives by those from whom support is derived, such as students, parents of students, alumni, legislators, as well as corporations/businesses/industry. A good mission and key offerings of training that people need and can use for jobs, enormously aids the community college in this respect. If all bases of support are sought for advice and help, such as a solid advisory board from representatives of business, industry and labor, the community will be convinced that the college belongs to them and aid it in its economic recovery activities.

The seventh effective strategy is the pertinent quality curricu-

lum offerings. A community college cannot allow itself to provide a lower-calibre product, or one that does not have pertinency for its students. Frederick Rudolph, a historian at Williams College, has done a study of the American curriculum since 1636. Old courses have departed at a rate of 5% per year and new ones have commenced at the rate of 9% per year. In the 19th century the curriculum defined the market; but, in the 20th, the market has defined the curriculum. On the basis of statistical studies of the curricula of four year colleges, "the undergraduate curriculum, theoretically has been reconstructed completely at least once every 22 years (Hefferlin, 1969). Our market is now high technology oriented.

The eighth effective recovery strategy involves collaboration of institutions among themselves as well as with business, industry, and agencies.

1. In finding its unique mission and working in close cooperation with neighboring institutions, community colleges can eliminate programs that are low in enrollment and arrange for students to take them nearby.

2. Community colleges can also cooperate technically as well with other institutions of higher education. They may form cooperative television arrangements, shared computer usage, and cooperative job market data.

3. Community colleges can collaborate with institutions which are unlike themselves, such as with business and industry. They can collaborate on such matters as use of research equipment, technical libraries, internship programs for vocational technical training for students, apprenticeship programs at business sites, and the leased use of company equipment on campus.

Strong leadership is the ninth effective recovery strategy. Few of the forementioned effective strategies would occur in the community colleges without the instigation and guidance of a strong leader. The leader must have the determination and charisma to make good things happen. It involves regaining ascendancy in curriculum matters in these "high tech" times. The leader must have ingenuity and an unswerving commitment to institutional recovery.

The last effective strategy is determining the appropriate number of students. A community college, rather than simply pushing for increased enrollment, should determine that size of student body, or scope of enrollment, which is appropriate, cost-effective, and capable of permitting a focused mission and good quality in the educational environment. There are several factors which need to be considered in determining the appropriate enrollment size. One factor is the availability of physical resources and equipment to meet the student needs. There should be optimum usage of campus facilities. Yet at the same time the community college must remain careful not to acquire too many students and impose new extraordinary costs and obligations upon itself. The quality of the campus offerings must be maintained.

The future for higher education according to Riesman (1980) is bound to be a "turbulent period full of surprises." Toffler

states in Future Shock (1970) that we are living in an era where events happen and impinge on one another at a constantly accelerated rate. In The Third Wave (1980) he speaks of our overall change from an industrial society to a technological/informational one. To enhance recovery and meet student needs the community college must prepare to move solidly into these new areas that reflect our momentous societal change.

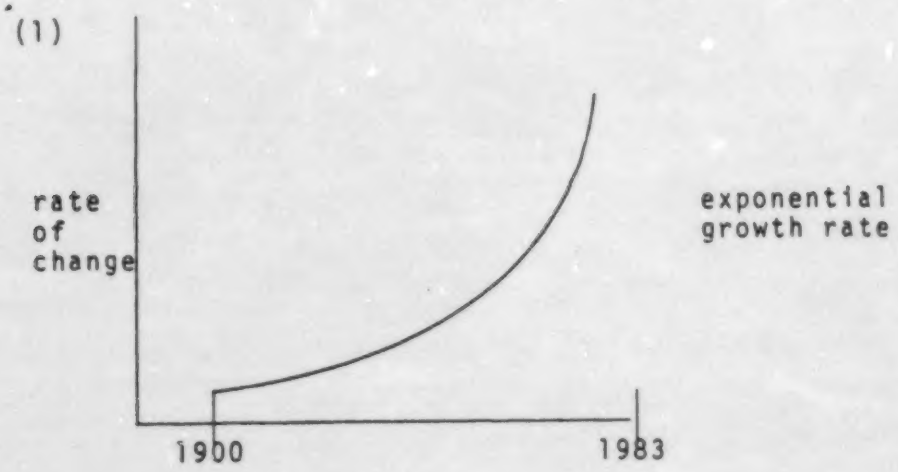
IMPLEMENTATION OF A HIGH TECHNOLOGY CURRICULUM

A case study of a vital community college of the '80s which is enhancing its economic stability with a high technology approach is Johnson County Community College, Overland Park, Kansas.

There are three basic steps that Johnson County Community College has followed to successfully implement a high technology program offering. The first of these has involved staff development. The necessary curricular offerings have next been developed, and finally, suitable arrangements have been made to successfully deliver the program offerings.

Caught up in the rapid changes taking place in the economy and the resulting impacts on employment patterns, the community college has to deal with the increasing rate of technological change. This was the primary theme that Alvin Toffler first

introduced in his classic work Future Shock (1970) and again a decade later in his book The Third Wave (1980).



Due to rapid technological change, cope-ability, or the ability to deal with change, may be the single most important skill we can teach to students today. In the 1980s there are new and diverse patterns of unemployment. There are three basic types:

1. Frictional, or "unavoidable" unemployment. This type consists of the "hard-core" unemployed.
2. Cyclical - This type is due to changes in the business cycles. The current high interest rates help cause this higher level of unemployment.
3. Structural - This type of unemployment is due to technological changes.

Structural unemployment is increasingly becoming the major concern. Even as the economy starts to recover from its current sluggishness, cyclical and frictional unemployment will fade in importance, but structural unemployment will continue to be of concern. Naisbitt, in his book Megatrends (1982), presents this general view when he describes the shift from an industrial society to an informational one.

The increased need for retraining in today's high technology environment can easily be seen by looking at current enrollment statistics at community colleges. For example, today at Johnson County Community College: thirty-five percent of the total credit students are thirty years of age or older, and approximately twenty percent already have more than two years of college credit.

These statistics clearly illustrate that both training and retraining are needed to prepare individuals to take advantage of employment opportunities in today's rapidly changing high technology society.

Staff Development - Having the staff ready to implement a high technology program offering was the first activity to be considered. At Johnson County Community College
meaningful staff development activities. The key to meaningful,

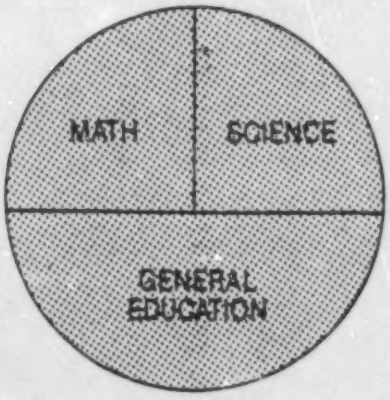
long run staff development has been to make certain that a grass roots or "bubble up" approach has been followed rather than having to superimpose a strategy from the top. It has been important to first know what actual staff needs have been before establishing programs "good" for them. The following steps can be useful in implementing a staff development program.

1. Do an in-depth staff inventory to see what skills already exist on the campus and what the unmet needs are.
2. Establish individual development compacts that allow staff members to uniquely prepare themselves. (At Johnson County Community College we call these P.L.A.N.S. --Professional Long-Range Activities and Needs Survey).
3. Establish a college-wide annual theme for staff development. A useful initial theme might be centered around computer literacy.

Much of the literature today in higher education concerning Theory Z management and quality circles address these basic staff development issues.

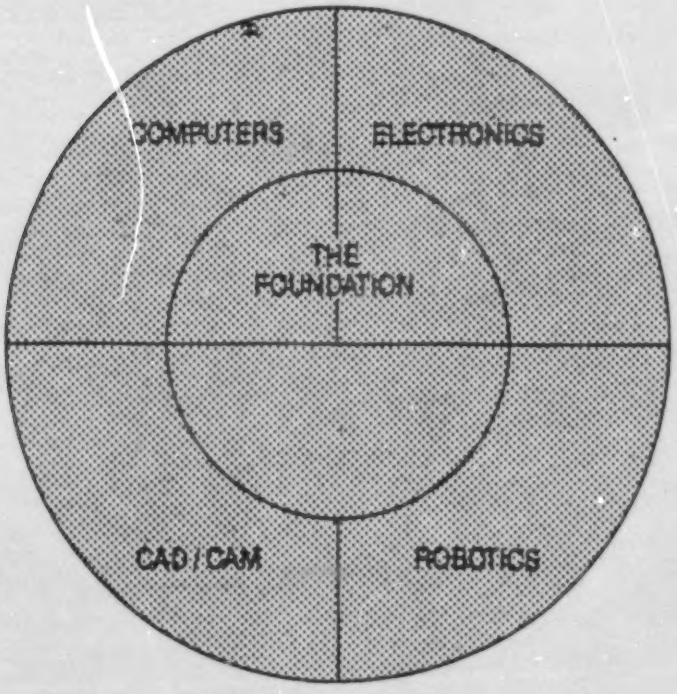
Curriculum Offerings - There are three basic components which have been necessary to have a true high technology curriculum offering. The first of these is the Foundation. The foundation at Johnson County Community College has been composed of solid offerings in math, science and general education courses. It is important to note that the complex nature of high technology requires a strong commitment to general education as part of the foundation.

THE FOUNDATION



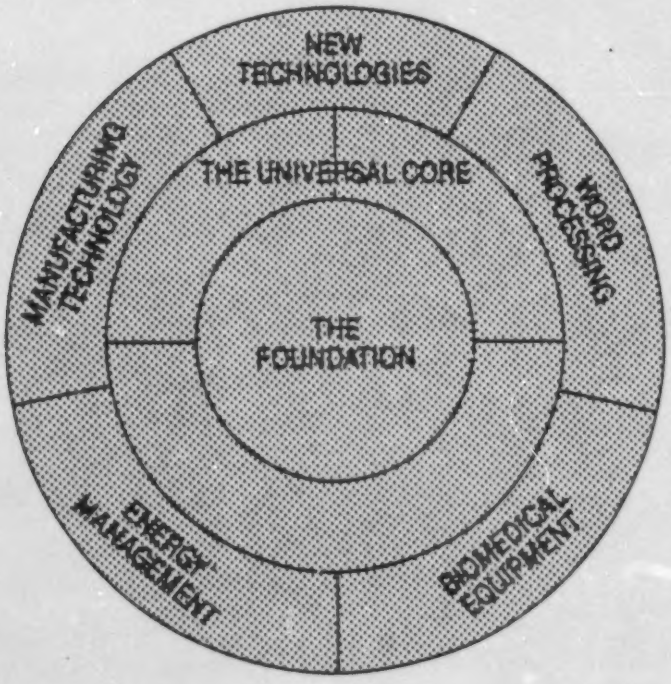
The second component necessary for a high technology curriculum is the Universal Core. Surrounding the foundation is a universal core which is made up of curricular offerings in four basic areas: computers, industrial electronics, CAD/CAM and robotics.

THE UNIVERSAL CORE



The third component consists of the Local Periphery. Surrounding the universal core is a local preiphery composed of those curricular offerings needed to meet the unique needs of the locality in which a particular community college is located. For example, at Johnson County Community College we currently have seen our periphery as being made up of the following programs: word processing, biomedical equipment, energy management and manufacturing technology. It is, of course, important to continue to monitor the needs of the local community to make certain newly emerging educational needs are being met.

THE LOCAL PERIPHERY



Delivery of the High Technology Curriculum - To successfully deliver a high technology offering over the long run requires increased cooperation with local business, industry, labor, and governmental agencies. Community colleges cannot hope to keep current with the rapid technological changes unless they establish these new liaisons rather than rely on one-shot, ad hoc relationships. Among the working relationships a community college may want to consider in this area are the following:

1. Establishing a separate business/industry/labor/government institute.
2. Offering off campus instruction at industrial and business locations.
3. Obtaining instructional equipment on a consignment basis to make certain it remains state-of-the-art.
4. Increased emphasis on cooperative training or apprenticeship programs.
5. Establishing a "Technologist in Residence" program on the campus.
6. Having an endowed technology chair or laboratory or ongoing research fund.

By a variety of approaches a community college is able to enhance its economic stability in the evolving world of high technology. Staff are enabled to grow in new and meaningful directions, and the curriculum is enhanced and remains relevant for the students. New students are attracted to the community college. The community becomes more meaningfully involved in the activities of the college and consequently more committed to ensuring its ongoing success.

BIBLOGRAPHY

American Association of University Professors. 1937. Depression, Recovery and Higher Education. A Report by Committee Y of the American Association of University Professors. Draft prepared by Malcolm M. Willey. New York: McGraw-Hill.

Cheit, Earl F. 1971. The New Depression in Higher Education. A joint publication by The Carnegie Commission on Higher Education and the Ford Foundation. New York: McGraw-Hill.

---. 1973. The New Depression in Higher Education--Two Years Later. Berkeley: The Carnegie Commission on Higher Education.

Minter, W. John, and Bowen, Howard R. September 1980. Preserving America's Investment in Human Capital. A Study of Public Higher Education, 1980. Washington: D.C.: American Association of State Colleges and Universities.

Naisbitt, John. 1982 Megatrends. New York: Warner Books.

Parker, Gail T. 1979. The Writing on the Wall: Inside Higher Education in America. New York: Simon and Schuster.

Riesman, David. 1980. On Higher Education. The Academic Enterprise in an Era of Rising Student Consumerism. San Francisco: Jossey-Bass.

Rudolph, Frederick. 1977. Curriculum: A History of the American Under-Graduate Course of Study since 1636. The

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OGIES IN COMMUNITY COLLEGES

BIBLOGRAPHY

Carnegie Council on Policy Studies in Higher Education. San Francisco: Jossey-Bass.

Toffler, Alvin. 1970 Future Shock. New York: Random House.

---. 1980. The Third Wave. New York: Morrow.

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